

REMARKS

Reconsideration of this application is respectfully requested.

Claims 1, 4, 8-12, and 14 are amended, claims 5-7 are deleted and new claims 20-24 are added. Upon entry of these amendments, the pending claims would be claims 1-4 and 8-24.

Claim 1 has been amended to recite that the photosensitive resin is in the form of an aqueous emulsion and to recite that the compound of ingredient B is at least one monomer having at least one photoreactive ethylenically unsaturated group. Support for reciting that the present composition is in the form of an emulsion may be found throughout the present specification, e.g., at page 52, lines 3-7. Support for reciting that ingredient (B) is at least one monomer having at least one photoreactive ethylenically unsaturated group may be found in the present specification at page 10, line 14, and page 11, lines 15-22.

Support for the amendment of claim 4 may be found in the present specification at page 11, lines 19-22.

Claim 8 has been reworded to recite a photoresist ink. The wording used in the amended form of claim 8 is similar to the wording used to recite the screen printing stencil recited in original claim 12.

Claim 9 has been reworded to recite a photoresist ink, consistent with the amendment to claim 8.

Claim 14 has been reworded to recite a printed wiring board, consistent with wording used in original claim 12.

New claim 20 corresponds to original claim 5 written in independent form and reciting the amendments to component (B) made to claim 1.

New claim 21 corresponds to original claim 6.

New claim 22 is supported by original claim 2.

New claim 23 is supported by original claim 3.

For the reasons given on page 2-4 of the Official Action, claims 7-9 are rejected under 35 USC 112, second paragraph, and 35 USC 101. However, these rejections are obviated by the attached proposed amendments. In particular, claim 7 has been deleted in lieu of the subject matter claimed in claim 12, and claims 8 and 9 have been amended to positively recite a photoresist ink.

For the reasons given on page 4 of the Official Action, claim 14 is rejected under 35 USC 101. However, this rejection has been obviated by the attached proposed amendments, whereby a printed wiring board is positively recited. It will be noted that the amendment to claim 14 also serves to provide proper antecedent basis for the printed wiring board recited in claims 15 and 16.

For the reasons given on pages 4 and 5 of the Official Action, claims 1-19 are rejected under 35 USC 112, second paragraph. However, this rejection has been obviated by the attached proposed amendments, whereby the word "type" has been deleted from claim 1, and claim 1 has been amended to positively recite that the photosensitive resin composition is in the form of an aqueous emulsion.

Accordingly, the rejections under 35 USC 101 and 35 USC 112 should be withdrawn.

For the reasons given on page 5 of the Official Action, claims 1-2, 7-10 and 12-14 are

rejected under 35 USC 102(b) over the disclosure of "Higuchi" (JP 54-135526 as evidenced by English translation PTO 03-3597). The Examiner states that PTO-03-3597 satisfies the recitations of claims 1-2, 7-10 and 12-14, provided that the n-alkylol(meth)acrylamide derivative is regarded to be both ingredient (A) and ingredient (B).

This rejection is obviated by the attached proposed amendments, whereby claim 1 is amended to recite that ingredient (B) is a monomer.

For the reasons given on pages 5-7 of the Official Action, claims 1-2, 7-10 and 12-14 are rejected under 35 USC 103(a) over the disclosure of "Higuchi" (JP 54-135526 as evidenced by English translation PTO 03-3597), in view of the disclosure of "Balfour et al" (EP 0 249 306) and the disclosure of "Plambeck" (US 2,791,504).

The Balfour disclosure and the Plambeck patent fail to provide a motivation to add a monomer ingredient (B) to the n-alkylol(meth)acrylamide derivative recited in PTO 03-3597. This n-alkylol(meth)acrylamide derivative described in PTO 03-3597 includes multiple photopolymerizable groups with ethylenic unsaturation. PTO-03-3597 teaches that the resin composition cures sufficiently without any additional polymerizable monomer.

As pointed out in Comparative Example II-1 on pages 62 and 63 of the present specification, resins excluding the polymerizable monomer ingredient (B) have inferior properties. The advantages of the present invention are not suggested or appreciated by PTO 03-3597, whether viewed alone or in combination with the Balfour disclosure and the Plambeck patent.

For the reasons given on pages 7 and 8 of the Official Action, claims 1-2, 7-10, 12-14 and

18-19 are rejected under 35 USC 103(a) over the disclosure of "Balfour et al" (EP 0 249 306), in view of the disclosure of "Higuchi" (JP 54-135526 as evidenced by English translation PTO 03-3597).

The Balfour disclosure teaches that polyvinyl alcohol is reacted with n-hydroxymethylacrylamide in a non-aqueous non-solvent, such as toluene, for the polyvinyl alcohol. As stated at page 3, column 3, lines 12-17 and 37-48, it may be desirable to azeotropically remove water produced by etherification during the course of the reaction.

PTO 03-3597 teaches that polyvinyl alcohol is reacted with n-hydroxymethylacrylamide in water. The reactions of the Balfour disclosure and PTO 03-3597 are so different that it would not be obvious to substitute one for another.

Page 3 of PTO 03-3597 refers to drawbacks relating to a resin described in Tokko No. 49-5923. PTO 03-3597 does not state how the resin of Tokko No. 49-5923 was made. The Higuchi publication, corresponding to PTO 03-3597, published in 1979. The Balfour patent did not publish until 1987. There is no indication in the Balfour publication that the drawbacks alleged regarding the resin described in Tokko No. 49-5923 pertain to the resin in the Balfour disclosure. It is not obvious to attribute alleged drawbacks of the resin described in Tokko No. 49-5997 to the resin described in the Balfour disclosure.

At page 2, column 1, lines 1-3 of the Balfour disclosure, it is stated:

This invention is concerned with the preparation of water-soluble polymeric materials containing unsaturated groups capable of polymerization.

Since the invention of the Balfour patent is concerned with water soluble polymeric materials, it would not be obvious to add water insoluble polymeric materials thereto.

Therefore, there is insufficient motivation to combine the disclosures of PTO 03-3597 and the Balfour disclosure in the manner suggested in the Official Action. For reasons given above, there is also insufficient motivation to add an ethylenically unsaturated monomer to the resin described in PTO 03-3597.

For the reasons given on pages 8 and 9 of the Official Action, claim 11 is rejected under 35 USC 103(a) over the disclosure of "Higuchi" (JP 54-135526 as evidenced by English translation PTO 03-3597), in view of the disclosure of "Reichel et al" (US 3,853,561).

The Reichel patent fails to overcome the deficiencies of PTO 03-3597 in suggesting embodiments of claim 1, from which claim 11 depends, for-reasons given above.

For the reasons given on pages 9 and 10 of the Official Action, claim 11 is rejected under 35 USC 103(a) over the disclosure of "Higuchi" (JP 54-135526 as evidenced by English translation PTO 03-3597), in view of the disclosure of "Balfour et al" (EP 0 249 306) and the disclosure of "Plambeck" (US 2,791,504), and further in view of the disclosure of "Reichel et al" (US 3,853,561).

The Reichel patent fails to overcome the deficiencies of PTO 03-3597, the Balfour disclosure and the Ptambeck patent in suggesting embodiments of claim 1, from which claim 11 depends, for reasons given above.

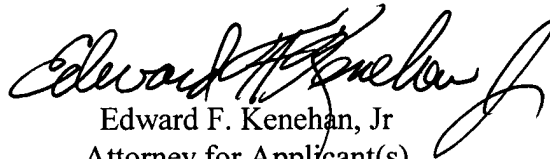
Accordingly, the rejections under 35 USC 102 and 35 USC 103 should be withdrawn.

Allowance is requested.

In the event that this paper is not timely filed, Applicant respectfully petition for an appropriate extension of time. The fees for such an extension or any other fees that may be due with respect to this paper may be charged to Deposit Account No. 50-2866.

Respectfully submitted,

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